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- (71) Applicant (for all designated States except US): **CANON KABUSHIKI KAISHA** [JP/JP]; 3-30-2, Shimomaruko, Ohta-ku, Tokyo 146-8501 (JP).
- (72) Inventor; and
(75) Inventor/Applicant (for US only): **OKAMOTO, Tadashi** [JP/JP]; c/o CANON KABUSHIKI KAISHA, 3-30-2, Shimomaruko, Ohta-ku, Tokyo 146-8501 (JP).
- (74) Agents: **OKABE, Masao** et al.; No. 602, Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-0005 (JP).
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(54) Title: METHOD OF ANALYZING SUBSTANCE ON SUBSTRATE BY MASS SPECTROMETRY

(57) Abstract: Provided is a method making it possible to measure the molecular weight useful for the specification of a substance bonded on a substrate by MALDI-TOF MS. When the substance is to be bonded on the substrate, MALDI-TOF MS analysis can be utilized by providing a partial structure to be disconnected by light in the bonded portion and selectively disconnecting the partial structure by light having a predetermined wavelength to bring the substance in an unfixed state.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/08197

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ G01N 27/64, G01N33/53, G01N37/00, H01J49/40, H01J49/10, H01J49/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G01N27/62-27/70, G01N33/00-33/, H01J49/00-49/48

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Japanese Utility Model Gazette 1926-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2003, Japanese Registered Utility Model Gazette 1994-2003, Japanese Gazette Containing the Utility Model 1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI/L, Web of Science, CAS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/20020 A (SEQUENOM, INC.) 1998.05.14 page 33, line 24 - page 47, line 14 page 52, line 4 - page 68, line 9 page 103, line 1 - page 104, line 11 figures 1-7	1-6, 13-21, 24-30, 37, 38
Y	page 33, line 24 - page 47, line 14 page 52, line 4 - page 68, line 9 page 103, line 1 - page 104, line 11 figures 1-7 & JP 2001-503760 A	7-12, 22, 23 31-36
Y	G.Marriott, et al.: "Photomodulation of the nucleating activity of photocleavable cross-linking actin dimer" BIOCHEMISTRY INTERNATIONAL, vol.26, no.5, 1992 pages 943-951 *the whole document*	7-11, 22, 31-35



Further documents are listed in the continuation of Box C.



See patent family annex.

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3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan

Authorized officer

Masamitsu TAKABA

Telephone No. +81-3-3581-1101 Ext. 3290



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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	"PC BIOTIN AND RELATED PHOTOCLEAVABLE MODIFIERS" Glen Report, vol.14, no.1, Feb. 2001, pages 8,9 * the whole document *	12,23,36
X	S.Hahner, et al.: "Matrix-assisted laser desorption/ionization mass spectrometry of DNA using photocleavable biotin" BIOMOLECULAR ENGINEERING, vol.16, 1999, pages 127-133 * the whole document *	1-6,13-15
A	WO 98/31830 A (BRAX GENOMICS LIMITED) 1998.07.23 * the whole document * & JP 2001-508307 A	1-38
A	WO 99/67424 A (UNIVERSITY OF VERMONT) 1999.12.29 page 3, line 10 - line 29 & US 6124099 A	7-11,22, 31-35
A	WO 98/20166 A (SEQUENOM, INC.) 1998.05.14 * the whole document * & JP 2002-507883 A	1-38